

*Hawley's*  
*Condensed Chemical*  
*Dictionary*

*TWELFTH EDITION*

*Revised by*  
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VAN NOSTRAND REINHOLD COMPANY  
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source of voluntary consensus standards. The society operates via more than 125 main technical committees which function in prescribed fields under regulations that ensure balanced representation among producers, users, and general-interest participants. Headquarters of the society is at 655 15th St. Washington, DC 20005.

**American Society of Pharmacology and Experimental Therapeutics. (ASPET).**

It was founded in 1908 and has over 3700 members. It is a scientific society of investigators in pharmacology and toxicology interested in research and promotion of pharmacological knowledge and its use among scientists and the public. The address is 9650 Rockville Pk., Bethesda, MD 20814.

**americium.** Am. A synthetic radioactive element of atomic number 95, a member of the actinide series. Atomic weight 241; 14 isotopes of widely varying half-life. Valence 3, but divalent, tetravalent, and higher valencies exist. Alpha and gamma emitter, forms compounds with oxygen, halides, lithium, etc. Metallic americium is silver-white crystalline, d 13.6, mp approximately 100C. Half-life of  $^{241}\text{Am}$  is 458 years.

Derivation: Multiple neutron capture in plutonium in nuclear reactors, plutonium isotopes yield  $^{241}\text{Am}$  and  $^{243}\text{Am}$  on beta decay. The metal is obtained by reduction of the trifluoride with barium in a vacuum at 1200C.

Hazard: A radioactive poison.

Use: Gamma radiography, radiochemical research, diagnostic aid, electronic devices.

**"Amerlate" phosphorus [Amerchol].** TM for the isopropyl ester of hydroxy, normal and branched chain acids of lanolin. A light yellow, soft solid that liquefies on contact with the skin. A hydrophilic emollient, moisturizer, conditioning agent, lubricant, pigment dispersant, and nonionic auxiliary without emulsifier.

**"Amersil DMC-287" [Amerchol].**

TM for emollient.

Use: Stabilizer, plasticizer, and lubricant.

**Ames dial.** A device used for measuring the thickness of paint film.

**amethopterin.** See methotrexate.

**amiben.** Generic name for 3-amino-2,5-dichlorobenzoic acid.  $\text{C}_6\text{H}_2\text{NH}_2\text{Cl}_2\text{COOH}$ .  
Use: Herbicide or plant growth regulator.

**amide.** A nitrogenous compound related to or derived from ammonia. Reaction of an alkali

metal with ammonia yields inorganic amides, e.g., sodium amide ( $\text{NaNH}_2$ ). Organic amides are characterized by an acyl group ( $-\text{CONH}_2$ ) usually attached to an organic group ( $\text{R}=\text{CONH}_2$ ); formamide ( $\text{HCONH}_2$ ) and carbamide (urea)  $[\text{CO}(\text{NH}_2)_2]$  are common examples.

See also polyamide.

**amidinomycin.**  $\text{C}_9\text{H}_{18}\text{N}_4\text{O}$ . An antibiotic which partially inhibits spore-forming bacteria.

**4-amidino-1-(nitrosaminoamidino)-1-tetrazene.**  
See tetrazene.

**amidol.** See 2,4-diaminophenol hydrochloride.

**amidopropylamine oxide.**

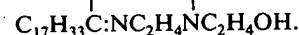
Use: Foamer, foam booster, foam stabilizer; scour for household, cosmetic, and industrial applications.

**aminacrine hydrochloride.** USAN name for 9-amino-acridine hydrochloride.

**amination.** The process of making an amine ( $\text{RNH}_2$ ). The methods commonly used are (1) reduction of a nitro compound and (2) action of ammonia on a chloro, hydroxy, or sulfonic acid compound.

**amine.** A class of organic compounds of nitrogen that may be considered as derived from ammonia ( $\text{NH}_3$ ) by replacing one or more of the hydrogen atoms with alkyl groups. The amine is primary, secondary, or tertiary depending on whether one, two, or three of the hydrogen atoms are replaced. All amines are basic in nature, and usually combine readily with hydrochloric or other strong acids to form salts.  
See also fatty amine.

**amine 220.** 2-(8-heptadecenyl)-2-imidazoline-1-ethanol).



Properties: D 0.9330 (20/20C), bulk d 7.76 (20C) lb/gal, bp 235C (1 mm Hg), flash p 465F (240C). Combustible.

Use: Demulsifier used particularly in the recovery of tar from water-gas process emulsions. A powerful cationic wetting agent. Useful in flotation processes involving siliceous minerals and the formation of emulsions and dispersions under acidic conditions.

**amine 248.** Dark-colored liquid or paste consisting of a non-volatile amine mixture with bis-(hexamethylene)triamine and its homologs as principal components. Disperses readily in water.